

08/913430

NOTICE TO COMPLY WITH REQUIREMENTS FOR PATENT APPLICATIONS CONTAINING
NUCLEOTIDE SEQUENCE AND/AMINO ACID SEQUENCE DISCLOSURES

The nucleotide and/or amino acid sequence disclosure contained in this application does not comply with the requirements for such a disclosure as set forth in 37 CFR 1.821 - 1.825 for the following reason(s):

- ☐ 1. This application clearly fails to comply with the requirements of 37 CFR 1.821 - 1.825. Applicant's attention is directed to these regulations, published at 1114 OG 29, May 15, 1990 and at 55 FR 18230, May 1, 1990.
- ☐ 2. This application does not contain, as a separate part of the disclosure on paper copy, a "Sequence Listing" as required by 37 CFR 1.821(c).
- ☐ 3. A copy of the "Sequence Listing" in computer readable form has not been submitted as required by 37 CFR 1.821(e).
- ☒ 4. A copy of the "Sequence Listing" in computer readable form has been submitted. However, the content of the computer readable form does not comply with the requirements of 37 CFR 1.822 and/or 1.823, as indicated on the attached copy of the marked-up "Raw Sequence Listing."
- ☐ 5. The computer readable form that has been filed with this application has been found to be damaged and/or unreadable as indicated on the attached CRF Diskette Problem Report. A substitute computer readable form must be submitted as required by 37 CFR 1.825(d).
- ☐ 6. The paper copy of the "Sequence Listing" is not the same as the computer readable form of the "Sequence Listing" as required by 37 CFR 1.821(e).
- ☐ 7.

Other: _____

Applicant must provide:

- ☒ An initial or substitute computer readable form (CRF) copy of the "Sequence Listing"
- ☒ An initial or substitute paper copy of the "Sequence Listing", as well as an amendment directing its entry into the specification
- ☒ A statement that the content of the paper and computer readable copies are the same and, where applicable, include no new matter, as required by 37 CFR 1.821(e) or 1.821(f) or 1.821(g) or 1.825(b) or 1.825(d)

For questions regarding compliance with these requirements, please contact:

For Rules Interpretation, call (703) 308-1123

For CRF submission help, call (703) 308-4212

For PatentIn software help, call (703) 557-0400

Please return a copy of this notice with your response.

Raw Sequence Listing Error Summary

ERROR DETECTED SUGGESTED CORRECTION

SERIAL NUMBER: 08/913,430A

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- 1 Wrapped Nucleics The number/text at the end of each line "wrapped" down to the next line.
This may occur if your file was retrieved in a word processor after creating it.
Please adjust your right margin to .3, as this will prevent "wrapping".
- 2 Wrapped Aminos The amino acid number/text at the end of each line "wrapped " down to the next line.
This may occur if your file was retrieved in a word processor after creating it.
Please adjust your right margin to .3, as this will prevent "wrapping".
- 3 Incorrect Line Length The rules require that a line not exceed 72 characters in length. This includes spaces.
- 4 Misaligned Amino Acid The numbering under each 5th amino acid is misaligned. This may be caused by the use of tabs
Numbering between the numbering. It is recommended to delete any tabs and use spacing between the numbers.
- 5 Non-ASCII This file was not saved in ASCII (DOS) text, as required by the Sequence Rules.
Please ensure your subsequent submission is saved in ASCII text so that it can be processed.
- 6 Variable Length Sequence(s) contain n's or Xaa's which represented more than one residue.
As per the rules, each n or Xaa can only represent a single residue.
Please present the maximum number of each residue having variable length and
indicate in the (ix) feature section that some may be missing.
- 7 PatentIn ver. 2.0 "bug" A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid
sequence(s) . Normally, PatentIn would automatically generate this section from the
previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section
to the subsequent amino acid sequence.
- 8 Skipped Sequences Sequence(s) missing. If intentional, please use the following format for each skipped sequence:
(OLD RULES) (2) INFORMATION FOR SEQ ID NO:X:
 (i) SEQUENCE CHARACTERISTICS:(Do not insert any headings under "SEQUENCE CHARACTERISTICS")
 (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X:
 This sequence is intentionally skipped

Please also adjust the "(iii) NUMBER OF SEQUENCES:" response to include the skipped sequence(s).
- 9 Skipped Sequences Sequence(s) missing. If intentional, please use the following format for each skipped sequence.
(NEW RULES) <210> sequence Id number
 <400> sequence Id number
 000
- 10 Use of n's or Xaa's Use of n's and/or Xaa's have been detected in the Sequence Listing.
(NEW RULES) Use of <220> to <223> is MANDATORY if n's or Xaa's are present.
In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
- 11 Use of <213>Organism Sequence(s) are missing this mandatory field or its response.
(NEW RULES)
- 12 Use of <220>Feature Sequence(s) are missing the <220>Feature and associated headings.
(NEW RULES) Use of <220> to <223> is MANDATORY if <213>ORGANISM is "Artificial" or "Unknown"
Please explain source of genetic material in <220> to <223> section.
(See "Federal Register," 6/01/98, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of new Rules)
- 13 PatentIn ver. 2.0 "bug" Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted
file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing).
Instead, please use "File Manager" or any other means to copy file to floppy disk.

T. Swartz

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PAGE: 1

RAW SEQUENCE LISTING
PATENT APPLICATION US/08/913,430A

DATE: 05/14/1999
TIME: 14:10:17

Input Set: H913430A.RAW

This Raw Listing contains the General Information
Section and up to first 5 pages.

pp 5, 3, 4

Does Not Comply
Corrected Diskette Needed

```
1 <110> APPLICANT: Walker, John
2 Lee, Rogan
3 Dougherty, Stephen W.
4 <120> TITLE OF INVENTION: Antigen Composition Against Mycoplasma
5 <130> FILE REFERENCE: U-011415-0
6 <140> CURRENT APPLICATION NUMBER: US/08/913,430A
7 <141> CURRENT FILING DATE: 1997-12-09
8 <150> EARLIER APPLICATION NUMBER: PCT/AU96/00149
9 <151> EARLIER FILING DATE: 1996-03-15
10 <150> EARLIER APPLICATION NUMBER: PN 1789
11 <151> EARLIER FILING DATE: 1995-03-16
12 <160> NUMBER OF SEQ ID NOS: 18
13 <170> SOFTWARE: PatentIn Ver. 2.0 - beta
14 <210> SEQ ID NO 1
15 <211> LENGTH: 1782
16 <212> TYPE: DNA
17 <213> ORGANISM: Mycoplasma hyopneumoniae
18 <400> SEQUENCE: 1
19 atgaaaaaaa tgccactata ccagaggaaa gagcagtata taaaataatt aaaattacat 60
20 tttcttcatt tgcgccagaa tttttaagaa ttagtacatt aaaaagtaga acaaaagtta 120
21 ttaatgtaaa cattagcgca atccttaaga aaaaattaaa agttttatct atttttttta 180
22 atcgaaatcc aaccaggcat aaatccttgt cagtatttat caagtcggta ttttttcatt 240
23 atttctacta aaatattatt tgaatttgca ttttccataa tctaaaattt tacatttttt 300
24 tataacaatt tttaaaaatt actctttaat ttatagtatt tttttatttt ttagtctaaa 360
25 ttataaaatt atcttgaatt ttatttgaat ttttataatt tagtactaaa aaatacaaat 420
26 attttttcct attctaagaa aaattcattt tttaaaaaaa attgattttt atagtataat 480
27 ttgtttgtat aattgaatta acttgatttg aaagggaaca aaatgaaaaa aatgcttaga 540
28 aaaaaattct tgtattcatc agctatttat gcaacttcgc ttgcatcaat tattgcattt 600
29 gttgcagcag gttgtggaca gacagaatca ggttcaactt ctgattctaa accacaagcc 660
30 gagacgctaa aacataaagt aagtaatgat tctattcgaa tagcactaac cgatccggat 720
31 aatcctcgat gaattagtgc ccaaaaagat attatttctt atgttgatga aacagaggca 780
32 gcaacttcaa caattacaaa aaaccaggat gcacaaaata actgactcac tcagcaagct 840
33 aatttaagcc cagcgccaaa aggatttatt attgcccctg aaaatggaag tggagtggga 900
34 actgctgtta atacaattgc tgataaagga attccgattg ttgcctatga tcgactaatt 960
35 actggatctg ataaatatga ttggtatggt tcttttgata atgaaaaagt tgggtgaatta 1020
36 caaggtcttt cacttgctgc ggtgtctatta ggaaaagaag atggtgcttt tgattcaatt 1080
37 gatcaaatga atgaatatct aaaatcacat atgccccaaag agacaatttc tttttatata 1140
38 atcgcggtgt cccaagatga taataattcc caatattttt ataatggtgc aatgaaagta 1200
39 cttaagaat taatgaaaaa ttgcgaaaat aaaataattg atttatctcc tgaaggcgaa 1260
40 aatgctgttt atgtcccagg atgaaattat ggaactgccg gtcaaagaat ccaatctttt 1320
41 ctaacaatta acaaagatcc agcagggtgg aataaaatca aagctgttgg ttcaaaacca 1380
42 gcttctattt tcaaaggatt tcttgcccca aatgatggaa tggccgaaca agcaatcacc 1440
43 aaattaaaac ttgaagggtt tgatacccaa aaaatctttg taactcgtca agattataat 1500
44 gataaagcca aaacttttat caaagacggc gatcaaaaata tgacaattta taaacctgat 1560
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RAW SEQUENCE LISTING
PATENT APPLICATION US/08/913,430A

DATE: 05/14/1999
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Input Set: H913430A.RAW

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45      aaagtttttag gaaaagttgc tgttgaagtt cttcgggttt taattgcaaa gaaaaataaa 1620
46      gcatctagat cagaagtcga aaacgaacta aaagcaaaac taccaaatat ttcatttaaa 1680
47      tatgataatc aaacatataa agtacaaggt aaaaatatta atacaatttt agtaagtcca 1740
48      gtaattgtta caaaagctaa tgttgataat cctgatgcct aa 1782
49      <210> SEQ ID NO 2
50      <211> LENGTH: 419
51      <212> TYPE: PRT
52      <213> ORGANISM: Mycoplasma hyopneumoniae
53      <400> SEQUENCE: 2
54      Met Lys Lys Met Leu Arg Lys Lys Phe Leu Tyr Ser Ser Ala Ile Tyr
55              5              10              15
56      Ala Thr Ser Leu Ala Ser Ile Ile Ala Phe Val Ala Ala Gly Cys Gly
57              20              25              30
58      Gln Thr Glu Ser Gly Ser Thr Ser Asp Ser Lys Pro Gln Ala Glu Thr
59              35              40              45
60      Leu Lys His Lys Val Ser Asn Asp Ser Ile Arg Ile Ala Leu Thr Asp
61              50              55              60
62      Pro Asp Asn Pro Arg Trp Ile Ser Ala Gln Lys Asp Ile Ile Ser Tyr
63              65              70              75              80
64      Val Asp Glu Thr Glu Ala Ala Thr Ser Thr Ile Thr Lys Asn Gln Asp
65              85              90              95
66      Ala Gln Asn Asn Trp Leu Thr Gln Gln Ala Asn Leu Ser Pro Ala Pro
67              100             105             110
68      Lys Gly Phe Ile Ile Ala Pro Glu Asn Gly Ser Gly Val Gly Thr Ala
69              115             120             125
70      Val Asn Thr Ile Ala Asp Lys Gly Ile Pro Ile Val Ala Tyr Asp Arg
71              130             135             140
72      Leu Ile Thr Gly Ser Asp Lys Tyr Asp Trp Tyr Val Ser Phe Asp Asn
73      145             150             155             160
74      Glu Lys Val Gly Glu Leu Gln Gly Leu Ser Leu Ala Ala Gly Leu Leu
75              165             170             175
76      Gly Lys Glu Asp Gly Ala Phe Asp Ser Ile Asp Gln Met Asn Glu Tyr
77              180             185             190
78      Leu Lys Ser His Met Pro Gln Glu Thr Ile Ser Phe Tyr Thr Ile Ala
79              195             200             205
80      Gly Ser Gln Asp Asp Asn Asn Ser Gln Tyr Phe Tyr Asn Gly Ala Met
81              210             215             220
82      Lys Val Leu Lys Glu Leu Met Lys Asn Ser Gln Asn Lys Ile Ile Asp
83      225             230             235             240
84      Leu Ser Pro Glu Gly Glu Asn Ala Val Tyr Val Pro Gly Trp Asn Tyr
85              245             250             255
86      Gly Thr Ala Gly Gln Arg Ile Gln Ser Phe Leu Thr Ile Asn Lys Asp
87              260             265             270
88      Pro Ala Gly Gly Asn Lys Ile Lys Ala Val Gly Ser Lys Pro Ala Ser
89              275             280             285
90      Ile Phe Lys Gly Phe Leu Ala Pro Asn Asp Gly Met Ala Glu Gln Ala
91              290             295             300
92      Ile Thr Lys Leu Lys Leu Glu Gly Phe Asp Thr Gln Lys Ile Phe Val
93      305             310             315             320
94      Thr Arg Gln Asp Tyr Asn Asp Lys Ala Lys Thr Phe Ile Lys Asp Gly

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RAW SEQUENCE LISTING PATENT APPLICATION US/08/913,430A

DATE: 05/14/1999
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Input Set: H913430A.RAW

95 325 330 335
96 Asp Gln Asn Met Thr Ile Tyr Lys Pro Asp Lys Val Leu Gly Lys Val
97 340 345 350
98 Ala Val Glu Val Leu Arg Val Leu Ile Ala Lys Lys Asn Lys Ala Ser
99 355 360 365
100 Arg Ser Glu Val Glu Asn Glu Leu Lys Ala Lys Leu Pro Asn Ile Ser
101 370 375 380
102 Phe Lys Tyr Asp Asn Gln Thr Tyr Lys Val Gln Gly Lys Asn Ile Asn
103 385 390 395 400
104 Thr Ile Leu Val Ser Pro Val Ile Val Thr Lys Ala Asn Val Asp Asn
105 405 410 415
106 Pro Asp Ala
107 <210> SEQ ID NO 3
108 <211> LENGTH: 25
109 <212> TYPE: PRT
110 <213> ORGANISM: Mycoplasma hyopneumoniae
111 <400> SEQUENCE: 13
W--> 112 Ala Gly Xaa Gly Gln Thr Glu Ser Gly Ser Thr Ser Asp Ser Lys Pro
113 5 10 15
114 Gln Ala Glu Thr Leu Lys His Lys Val
115 20 25
116 <210> SEQ ID NO 4
117 <211> LENGTH: 29
118 <212> TYPE: PRT
119 <213> ORGANISM: Mycoplasma hyopneumoniae
120 <400> SEQUENCE: 4
121 Thr Ile Tyr Lys Pro Asp Lys Val Leu Gly Lys Val Ala Val Glu Val
122 5 10 15
123 Leu Arg Val Leu Ile Ala Lys Lys Asn Lys Ala Ser Arg
124 20 25
125 <210> SEQ ID NO 5
126 <211> LENGTH: 16
127 <212> TYPE: PRT
128 <213> ORGANISM: Mycoplasma hyopneumoniae
129 <400> SEQUENCE: 5
130 Ala Glu Gln Ala Ile Thr Lys Leu Lys Leu Glu Gly Phe Asp Thr Gln
131 5 10 15
132 <210> SEQ ID NO 6
133 <211> LENGTH: 14
134 <212> TYPE: PRT
135 <213> ORGANISM: Mycoplasma hyopneumoniae
136 <400> SEQUENCE: 6
137 Lys Asn Ser Gln Asn Lys Ile Ile Asp Leu Ser Pro Glu Gly
138 5 10
139 <210> SEQ ID NO 7
140 <211> LENGTH: 14
141 <212> TYPE: PRT
142 <213> ORGANISM: Mycoplasma hyopneumoniae
143 <400> SEQUENCE: 7
W--> 144 Ala Gly Xaa Trp Ala Lys Glu Thr Thr Lys Glu Glu Lys Ser

see item 10 on Enn summary sheet

Jim 10

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RAW SEQUENCE LISTING
PATENT APPLICATION US/08/913,430A

DATE: 05/14/1999
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Input Set: H913430A.RAW

195 <222> LOCATION: (11)
 196 <223> OTHER INFORMATION: Residue may be A *use Xaa and explain*
 197 <220> FEATURE:
 198 <221> NAME/KEY: VARIANT
 199 <222> LOCATION: (13)
 200 <223> OTHER INFORMATION: Residue may be N
 201 <400> SEQUENCE: 11
 W--> 202 Ala Asp Pro Phe Arg Tyr Val Pro Gln Gly Gln Xaa Met Val Gly *see item 10 on Eva summary sheet*
 203 5 10 15
 204 <210> SEQ ID NO 12
 205 <211> LENGTH: 18
 206 <212> TYPE: PRT
 207 <213> ORGANISM: Mycoplasma hyopneumoniae
 208 <400> SEQUENCE: 12 *item 10*
 W--> 209 Ala Gly Xaa Leu Gln Lys Asn Ser Leu Leu Glu Glu Val Trp Tyr Leu
 210 5 10 15
 211 Ala Leu
 212 <210> SEQ ID NO 13
 213 <211> LENGTH: 20
 214 <212> TYPE: PRT
 215 <213> ORGANISM: Mycoplasma hyopneumoniae
 216 <400> SEQUENCE: 13
 217 Ala Lys Asn Phe Asp Phe Ala Pro Ser Ile Gln Gly Tyr Lys Lys Ile
 218 5 10 15
 219 Ala His Glu Leu
 220 20
 221 <210> SEQ ID NO 14
 222 <211> LENGTH: 12
 223 <212> TYPE: PRT
 224 <213> ORGANISM: Mycoplasma hyopneumoniae
 225 <400> SEQUENCE: 14
 226 Asn Leu Lys Pro Glu Gln Ile Leu Gln Leu Leu Gly
 227 5 10
 228 <210> SEQ ID NO 15
 229 <211> LENGTH: 19
 230 <212> TYPE: PRT
 231 <213> ORGANISM: Mycoplasma hyopneumoniae *item 10*
 232 <400> SEQUENCE: 15
 W--> 233 Leu Leu Lys Ala Glu Xaa Asn Lys Xaa Ile Glu Glu Ile Asn Thr Xaa
 234 5 10 15
 235 Leu Asp Asn
 236 <210> SEQ ID NO 16
 237 <211> LENGTH: 23
 238 <212> TYPE: DNA
 239 <213> ORGANISM: Mycoplasma hyopneumoniae
 240 <220> FEATURE:
 241 <221> NAME/KEY: modified_base
 242 <222> LOCATION: (3)
 243 <223> OTHER INFORMATION: primer sequence with modified base: inosine ("i")
 244 <220> FEATURE:

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Input Set: H913430A.RAW

Line	?	Error/Warning	Original Text
112	W	"N" or "Xaa" used: Feature required	Ala Gly Xaa Gly Gln Thr Glu Ser Gly Ser T
144	W	"N" or "Xaa" used: Feature required	Ala Gly Xaa Trp Ala Lys Glu Thr Thr Lys G
175	W	"N" or "Xaa" used: Feature required	Met Lys Leu Ala Lys Leu Leu Lys Gly Phe X
202	W	"N" or "Xaa" used: Feature required	Ala Asp Pro Phe Arg Tyr Val Pro Gln Gly G
209	W	"N" or "Xaa" used: Feature required	Ala Gly Xaa Leu Gln Lys Asn Ser Leu Leu G
233	W	"N" or "Xaa" used: Feature required	Leu Leu Lys Ala Glu Xaa Asn Lys Xaa Ile G
249	W	"N" or "Xaa" used: Feature required	acnaacgacg agaagccnca ggc
267	W	"N" or "Xaa" used: Feature required	ttnagcttng tgatngcctg ctc
277	W	"N" or "Xaa" used: Feature required	aggtcgatga tcttccancc